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| 26574 7590 09/23/2009<br>SCHIEF HARDIN, LLP<br>PATENT DEPARTMENT<br>233 S. Wacker Drive-Suite 6600<br>CHICAGO, IL 60606-6473 |             |                        |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/531,921

**Applicant(s)**

KAMMERLOCHER ET AL.

**Examiner**

MING HON

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 77-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 77-92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 29, 2009 has been entered.
2. Applicant's amendment filed on July 29, 2009 is acknowledged. Currently Claims 77-92 are pending and are new.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 77-92 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 77-80, 83-84, and 91-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lester US2003/0090697 in view of Murakami et al. US2001/0038461**

**hereinafter referred to as Murakami and further in view of Conley et al. US2003/0011633 hereinafter referred to as Conley.**

**As per Claim 77**, Lester teaches a control system for a printing or copying system, comprising

at least one operating unit for input and output of operating information of the printing or copying system and which is connected via an external network connection with a first apparatus being a printing or copying apparatus in which is provided a first control unit that controls the first apparatus, (Lester, Figure 3, Component 300 and 310 and Paragraph [0013])

at least one second control unit which controls at least one second apparatus of the printing or copying system; (Lester, Figure 2, Component 50 and Figure 3, Component 320, second apparatus contains control unit able to control operations of the printer)

a data line via which the first and second control units are connected with one another and via which the control data is transferred between the first and second control units with aid of a data transfer protocol; (Lester, Figure 3, Component 310 and 320, and Paragraph[0046]) and

the control data is output by the at least one operating unit in addition to the operating information. (Lester, Figure 2, Component 310 and 320 and Paragraph [0016], there is controller in first printer that is capable of sending operating data as in printing to the second printer)

Lester does not teach and comprises a control panel server which the at least one operating unit accesses as a client to output control data;

the control panel server in the first apparatus being connected via an internal network connection with a network agent via which a data exchange takes place with a plurality of sub-controllers;

Murakami teaches comprises a control panel server which the at least one operating unit accesses as a client to output control data; (Murakami, Figure 3 and Paragraph [0299], the server contains control data to control print jobs and is able to output data to printer)

the control panel server in the first apparatus being connected via an internal network connection with a network agent via which a data exchange takes place with a plurality of sub-controllers; (Murakami, Figure 3 and Paragraph[0299], printer server and printer internally connected, various components exists in the printer server and exchanges data)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Murakami into Lester. Lester teaches the use of the primary printer able to reroute jobs to other printers depending on certain parameters. Therefore the first printer contains the capabilities as in a master control panel. It would have been beneficial and efficient to implement this rerouting using a server to allow the number of printers in the network to expand and for more control options to be implemented.

Lester in view of Murakami does not teach graphical elements of a graphical user interface stored in a memory of the first apparatus, said graphical elements being transferred into the at least one operating unit and loaded there for display; However Conley teaches it. (Conley, Figure 2 and Paragraph [0016])

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Conley into Lester in view of Murakami. Lester teaches the printer's UI can be accessed as a webpage by the host computer however it failed to disclose that the printer's UI is stored in the memory of the printer. Since there is a direct connection between the first printer and the host computer, the webpage could have been retrieved from the printer. Conley teaches that the printer UI is retrieved from the printer and it will be beneficial because the host computer can retrieve the UI directly instead from a web server.

Therefore it would have been obvious to one of ordinary skill to combine the three references to obtain the invention in Claim 77.

**As per Claim 78**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein the second control unit is provided in the second apparatus to control it; the control panel server is connected with a master system parameter manager provided in the first apparatus; (Murakami, Figure 3 and Paragraph[0299], printer server and printer internally connected, various components exists in the printer server and exchanges data and Lester, Paragraph[0045], which contains a master system parameter manager which manages the print jobs and status of other printers)

the control panel server implements a synchronization of settings between the apparatus' image acquisition of the first apparatus and a corresponding slave system parameter manager of the second apparatus; (Lester, Paragraph[0045], by detecting the settings of the second printer and able to redirect the print job to the second printer. This redirection is considered synchronization because it's the same print job in first printer and second printer)and given an input of a first value of a first parameter in the first apparatus, a second value of a same parameter of the second apparatus is automatically modified depending on a value of the first parameter. (Lester, Paragraph [0045], Figure 2, any change in the print job that is to be redirected to the second printer will contain the change.)

Analysis is analogous to that made in Claim 77.

**As per Claim 79**, Lester in view of Murakami and Conley teaches a control system according to claim 78 wherein the first value and the second value are coupled with one another such that, given a change of one of the two values in a coupled state, the respective other value is modified by a same amount. (Lester, Paragraph [0045], Figure 2, any change in the print job that is to be redirected to the second printer will contain the change.)

Analysis is analogous to that made in Claim 78.

**As per Claim 80**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein a web server is provided that has access to the memory, and

stored data for graphical elements are designed for display of a web site. (Lester, Paragraph [0086]-[0087])

Analysis is analogous to that made in Claim 77.

**As per Claim 83**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein access to the operating information and to the control data takes place with aid of a distributed object model in which objects are contained in the control units of the printing or copying system. (Lester, Paragraph [0016] and Figure 1, Figure 2, due to limited capabilities of primary printer will cause the redirecting of the print job to second printer. The print job and print instructions are considered as objects and are sent to the control units that control printing in the respective printers)

Analysis is analogous to that made in Claim 77.

**As per Claim 84**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein the at least one operating unit has at least one object for input or output of the operating information and the control data, wherein data transfer between the at least one operating unit and the first control unit occurs with aid of the at least one object. (Lester, Paragraph [0016] and Figure 1, Figure 2, due to limited capabilities of primary printer will cause the redirecting of the print job to second printer. The print job and print instructions are considered as objects and are sent to the control units that control printing in the respective printers)

Analysis is analogous to that made in Claim 77.

**As per Claim 91**, Lester in view of Murakami and Conley teaches a control system according to claim 79 wherein an automatic modification of the first value or the second value of the same parameter is activated and deactivated. (Lester, Paragraph [0045], if the print job is not redirected to the second printer then the second value of the second printer will not be updated therefore considered deactivated.)

Analysis is analogous to that made in Claim 79.

**As per Claim 92**, Lester teaches a method for input and output of operating information and control data of a printing or copying system, (Lester, Figure 3, Component 300 and 310 and Paragraph[0013]) comprising the steps of: inputting or outputting the operating information with aid of at least one operating unit that is connected via an external network connection with a first apparatus being a printing or copying apparatus; controlling with a first control unit the first apparatus, Lester, Figure 3, Component 300 and 310 and Paragraph[0013])

controlling a second apparatus of the printing or copying system with a second operating unit; (Lester, Figure 2, Component 50 and Figure 3, Component 320, second apparatus contains control unit able to control operations of the printer)

transferring control data between the first and the second control units via a data line with aid of a data transfer protocol; and (Lester, Figure 3, Component 310 and 320, and Paragraph [0046])

outputting at least a portion of the transferred control data with aid of the at least one operating unit. (Lester, Figure 2, Component 310 and 320 and Paragraph [0016], there is controller in first printer that is capable of sending operating data as in printing to the second printer)

Lester does not teach said first control unit comprising a control panel server which accesses the at least one operating unit as a client to output the control data;

the control panel server being connected via an internal network connection with a network agent and exchanging data via the network agent with a plurality of sub-controllers;

Murakami teaches said first control unit comprising a control panel server which accesses the at least one operating unit as a client to output the control data; (Murakami, Figure 3 and



Paragraph [0299], the server contains control data to control print jobs and is able to output data to printer)

the control panel server being connected via an internal network connection with a network agent and exchanging data via the network agent with a plurality of sub-controllers; (Murakami, Figure 3 and Paragraph[0299], printer server and printer internally connected, various components exists in the printer server and exchanges data)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Murakami into Lester. Lester teaches the use of the primary printer able to reroute jobs to other printers depending on certain parameters. Therefore the first printer contains the capabilities as in a master control panel. It would have been beneficial and efficient to implement this rerouting using a server to allow the number of printers in the network to expand and for more control options to be implemented.

Lester in view of Murakami does not teach storing graphical elements of a graphical user interface in a memory of the printing or copying system, and said graphical elements are transferred to the at least one operating unit and loaded for display; However Conley teaches it. (Conley, Figure 2 and Paragraph [0016])

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Conley into Lester in view of Murakami. Lester teaches the printer's UI can be accessed as a webpage by the host computer however it failed to disclose that the printer's UI is stored in the memory of the printer. Since there is a direct connection between the first printer and the host computer, the webpage could have been retrieved from the printer. Conley teaches that the printer UI is retrieved from the printer and it will be beneficial because the host computer can retrieve the UI directly instead from a web server.

Therefore it would have been obvious to one of ordinary skill to combine the three references to obtain the invention in Claim 92.

**5. Claims 81 and 85 rejected under 35 U.S.C. 103(a) as being unpatentable over Lester US2003/0090697 in view of Murakami et al. US2001/0038461 hereinafter referred to as Murakami and further in view of Conley et al. US2003/0011633 hereinafter referred to as Conley as applied to Claim 77 and 84 respectively and further in view of Colby et al. US2003/0055965 hereinafter referred to as Colby.**

**As per Claim 81**, Lester in view of Murakami and Conley teaches a control system according to claim 77. Lester in view of Murakami and Conley do not teach wherein the data for the graphical elements of the user interface are generated with aid of a Java programming language or Hypertext Markup Language and are transferred from the control panel server to the at least one operating unit by means of Remote Method Invocation; However Colby teaches it. (Colby, Paragraph [0051] and [0053])

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Colby into Lester in view of Murakami and Conley. When sending data to peripheral devices, there must be some instructions to direct the transmission to the correct end destinations. Java is a popular object oriented programming language therefore sending objects will benefit from being defined in Java.

Therefore it would have been obvious to one of ordinary skill to combine the four references to obtain the invention in Claim 81.

**As per Claim 85**, Lester in view of Murakami and Conley teaches a control system according to claim 84. Lester in view of Murakami and Conley do not teach wherein a standardized model for abstract description of distributed objects occurs according to a Common Object Request Broker Architecture; However Colby teaches it. (Colby, Paragraph [0051])

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Colby into Lester in view of Murakami and

Conley. When sending data to peripheral devices, there must be some instructions or model to direct the transmission to the correct end destinations. It is well known to use a Common Object Request Broker Architecture.

Therefore it would have been obvious to one of ordinary skill to combine the four references to obtain the invention in Claim 81.

**6. Claim 82 and 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lester US2003/0090697 in view of Murakami et al. US2001/0038461 hereinafter referred to as Murakami and further in view of Conley et al. US2003/0011633 hereinafter referred to as Conley as applied to Claim 77 and further in view of White USPN 6125372.**

**As per Claim 82**, Lester in view of Murakami and Conley teaches a control system according to claim 77. Lester in view of Murakami and Conley do not teach wherein said data transfer protocol is a Simple Network Management Protocol; However White teaches it. (White, Column 6, Lines 24-31)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of White into Lester in view of Murakami and Conley. Lester in view of Murakami and Conley teaches various components such as server, printer, and copying machines connected to each other via a network. The Simple Network Management Protocol can be used as a network protocol and is effective in communicating between peripheral devices.

Therefore it would have been obvious to one of ordinary skill to combine the four references to obtain the invention in Claim 82.

**As per Claim 89**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein is provided for transfer of the control data and the operating information between the first, second, and at least one control unit or a database. (Lester, Paragraph [0016] and Figure 1, Figure 2, due to limited capabilities of primary printer will cause the redirecting of the print job to second printer. The print job and print instructions are considered as objects and are sent to the control units that control printing in the respective printers)

Lester in view of Murakami and Conley do not teach a distributed object model using a network protocol; However White teaches it. (White, Column 6, Lines 24-31)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of White into Lester in view of Murakami and Conley. Lester in view of Murakami and Conley teaches various components such as server, printer, and copying machines connected to each other via a network. The Simple Network Management Protocol can be used as a network protocol and is effective in communicating between peripheral devices.

Therefore it would have been obvious to one of ordinary skill to combine the four references to obtain the invention in Claim 89.

**7. Claim 86-88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lester US2003/0090697 in view of Murakami et al. US2001/0038461 hereinafter referred to as Murakami and further in view of Conley et al. US2003/0011633 hereinafter referred to as Conley as applied to Claim 77 and further in view of Schlonski et al. USPN7200613 hereinafter referred to as Schlonski.**

**As per Claim 86**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein the control data contain control variables, wherein values of the control variables are output with aid of the at least one operating unit and the values (Lester,

Paragraph [0016] and Figure 1, Figure 2, due to limited capabilities of primary printer will cause the redirecting of the print job to second printer. The print job and print instructions are considered as objects and are sent to the control units that control printing in the respective printers)

Lester in view of Murakami and Conley does not teach are administered with aid of a management information base; However Schlonski teaches it. (Schlonski, Column 4, Lines 34-36 and Figure 2A)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Schlonski into Lester in view of Murakami and Conley. Lester in view of Murakami and Conley teaches the use of a server panel. The server's functions will be improved by the use of a database to handle the various functionality of the server.

Therefore it would have been obvious to one of ordinary skill to combine the four references to obtain the invention in Claim 86.

**As per Claim 87**, Lester in view of Murakami and Conley teaches a control system according to claim 77 wherein; and in which the first control unit of the printing or copying system has access to the control data with aid of said information. (Lester, Paragraph [0016])

Lester in view of Murakami and Conley does not teach information of the control data are stored in a central database of the printing or copying system, wherein the information comprises at least a hierarchical classification of existing structure of control units and function units (Schlonski, Column 4, Lines 34-36 and Figure 2A)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Schlonski into Lester in view of Murakami and Conley. Lester in view of Murakami and Conley teaches the use of a server panel. The

server's functions will be improved by the use of a database to handle the various functionality of the server. The database has a hierarchical system to allow for efficient access.

Therefore it would have been obvious to one of ordinary skill to combine the four references to obtain the invention in Claim 87.

**As per Claim 88**, Lester in view of Murakami, Conley, and Schlonski teaches a control system according to claim 87 wherein the first or second control units are a control unit of the printing or copying system. (Lester, Figure 3, Component 310 and 320)

Analysis is analogous to that made in Claim 87.

**8. Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lester US2003/0090697 in view of Murakami et al. US2001/0038461 hereinafter referred to as Murakami and further in view of Conley et al. US2003/0011633 hereinafter referred to as Conley and White USPN 6125372 as applied to Claim 89 and further in view of and Colby et al. US2003/0055965 hereinafter referred to as Colby.**

**As per Claim 90**, Lester in view of Murakami, Conley, and White teaches the control system according to claim 89 wherein the transfer takes place using a Simple Network Management Protocol, (White, Column 6, Lines 24-31) wherein the database contains a Management Information Base. (White, Column 6, Lines 33-41, file system considered a database)

Lester in view of Murakami, Conley, and White does not teach with aid of a Remote Method Invocation Communication; However Colby teaches it. (Colby, Paragraph [0053])

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Colby into Lester in view of Murakami, Conley, and White. When sending data to peripheral devices, there must be some instructions to

direct the transmission to the correct end destinations. Java is a popular object oriented programming language therefore sending objects will benefit from being defined in Java.

Therefore it would have been obvious to one of ordinary skill to combine the five references to obtain the invention in Claim 90.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MING HON whose telephone number is (571)270-5245. The examiner can normally be reached on Mon- Fri 7:30 to 5:00 EST; 1st Friday Off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571)272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. H./

Examiner, Art Unit 2625

/Mark K Zimmerman/

Supervisory Patent Examiner, Art Unit 2625